Presentation

Circulation Element for City of Riverside

May 4, 2004

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Circulation Element

"...the general location and extent of existing and proposed major thoroughfares, transportation routes, and other local public utilities and facilities, all correlated with the land use element of the plan."

Circulation Element

- Existing Conditions
- Future Conditions upon General Plan Buildout
- Neighborhood Traffic
- Roadway Standards
- Bicycle/Pedestrian Facilities
- Transit
- Recommended Changes/Improvements

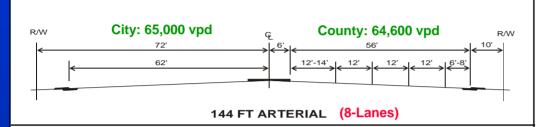
Scope of Services

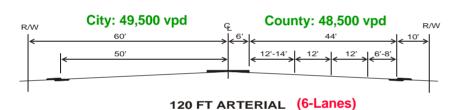
- Task 1: Develop Computer Traffic Model
- Task 2: Describe Existing Conditions
 - Street/highway conditions
 - Traffic volumes
 - Existing transit services
 - Intersection conditions
- Task 3: Review Prior Technical & Policy Documents
- Task 4: Identify Key Issues

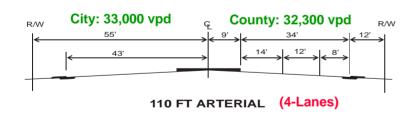
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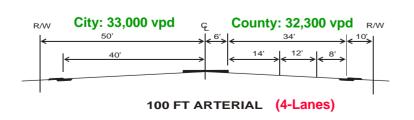
- Task 5: Forecast Future Traffic Volumes with Updated Land Use Plan
- Task 6: Identify Future Deficiencies
- Task 7: Evaluate Alternatives for the Extension of Overlook Parkway westerly of Washington Street
- Task 8: Prepare Draft Circulation Plan
 - Roadway classification changes
 - Physical system improvements
 - Goals & Policies

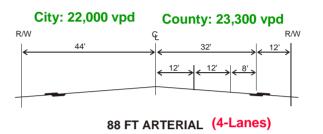
Roadway Cross Sections & Capacities (LOS 'D')

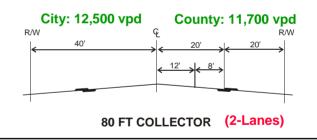


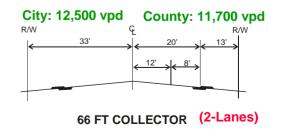




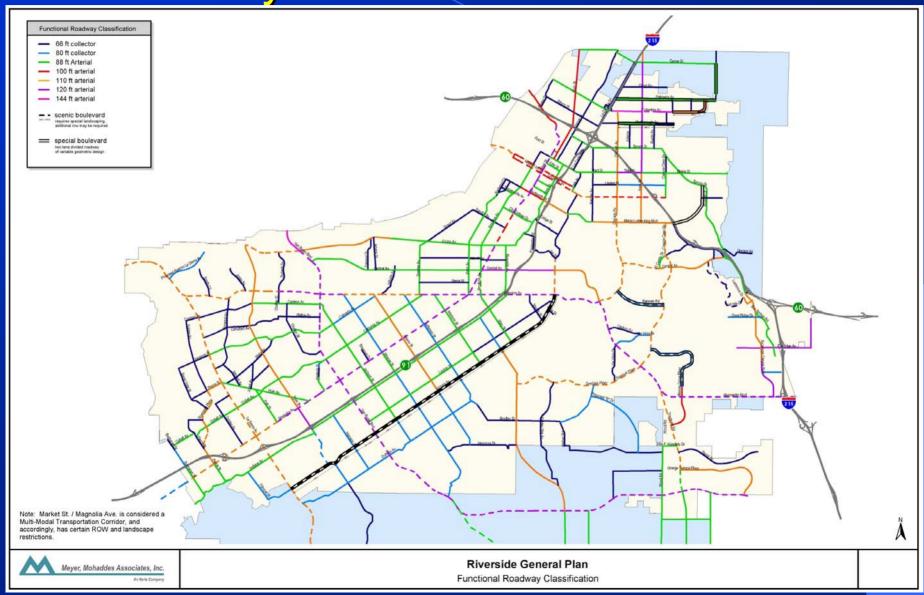




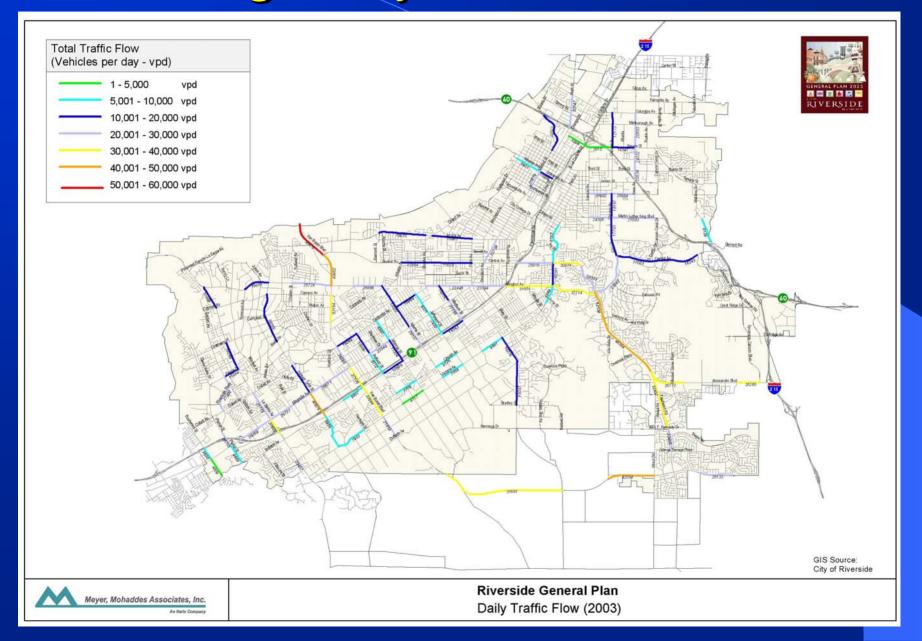




Existing Plan-Roadway Functional Classifications



Existing Daily Traffic Volumes

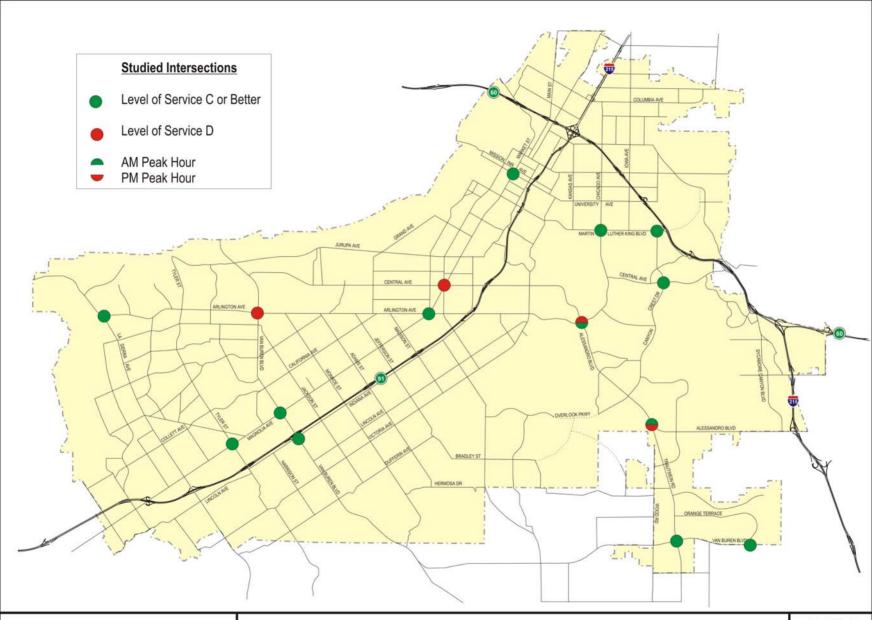


Existing High Volume Locations

- Van Buren Blvd north of Arlington Ave 49,900 to 56,500 vpd
- Alessandro Blvd between Chicago Ave and Trautwein Rd –
 42,100 to 46,400 vpd
- Van Buren Blvd west of Wood Rd 42,100 vpd
- Tyler St between Magnolia Ave and Indiana Ave 40,900 vpd
- Arlington Ave between Victoria Ave and Alessandro Blvd –
 37,200vpd
- Van Buren Blvd between Magnolia Ave and Indiana Ave –
 37,100 vpd

Existing Intersection Operating Conditions

- 15 Key Intersections Studied
- AM/PM Peak Hour Commute Hours
- New Traffic Counts 2003
- Highway Capacity Manual Methodology
- Grade on A-F Scale (A Excellent, F-Highly Congested)
 - 12 LOS C or better
 - 3 LOS D



Future Population Changes 2000-2025

POPULATION GROWTH:

- City: 25% Increase
- County: 62% Increase
- Regional: 34% Increase

COUNTY'S SHARE OF REGIONAL POPULATION

- 9% in 2000
- 13% in 2025

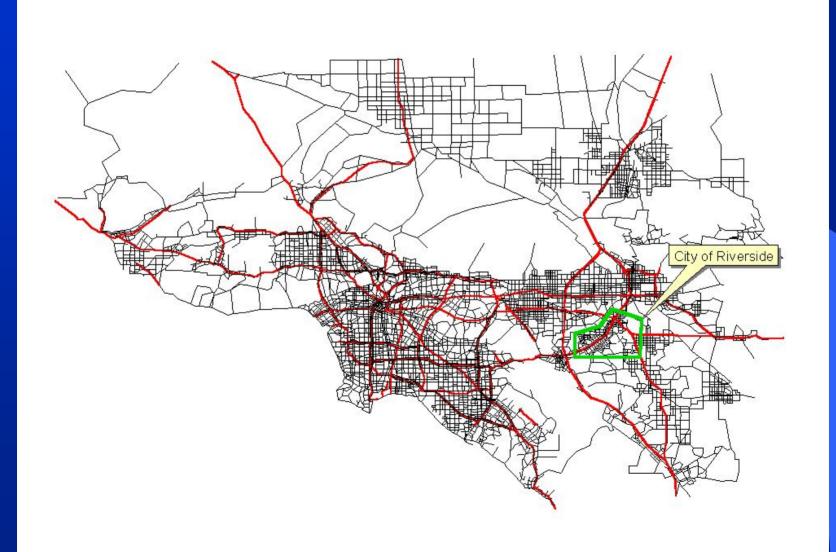
Regional Traffic Growth-2020

- SR-91 at the Orange County Line 95% increase
- SR-60/I-215 60% increase to about 300,000 vehicles per day-this is about 30% more than SR-91 carries today into Orange County
- I-15 in Murrieta/Temecula 90% increase
- I-215 near March Air Reserve Base 100% increase

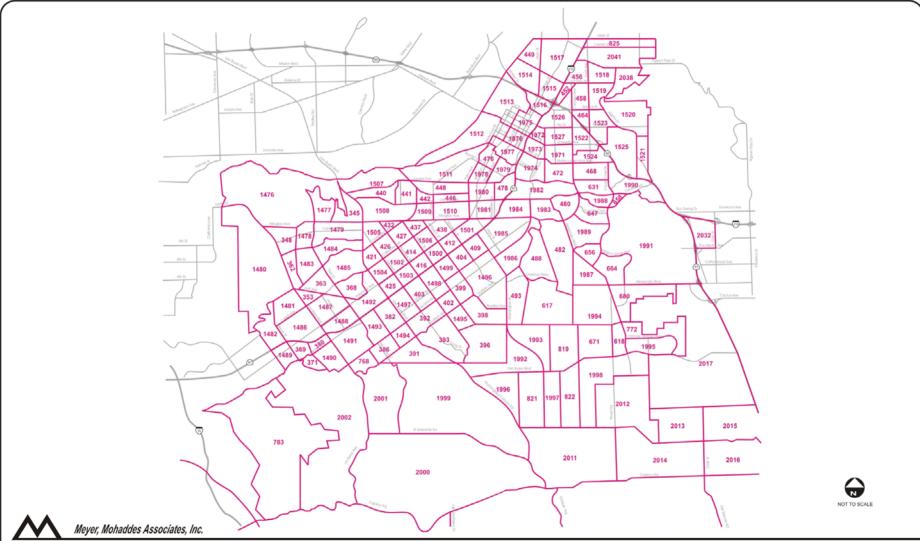
Computer Traffic Model

- Based on Regional Model (Southern California Association of Governments)
- Used to Predict Future Traffic Flow/Growth
- 2 Primary Components:
 - Land use zone system
 - Roadway network
- Used to Test Future Scenarios:
 - Land use change/growth
 - Roadway system improvements

SCAG Network



TAZ Zone System

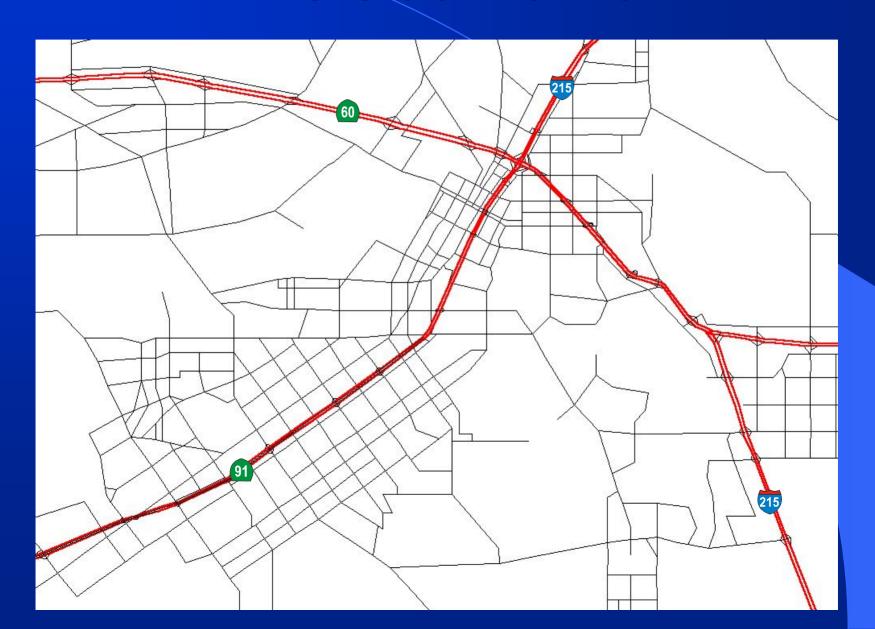


An Iteris Company

City of Riverside General Plan Update

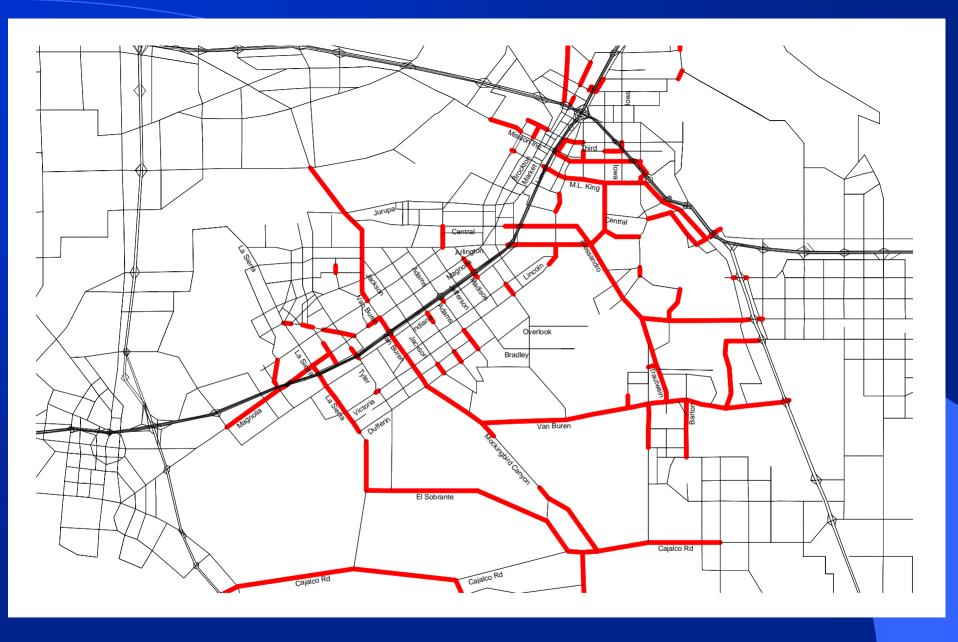
Figure X
Disaggregated CTP TAZ Zone Structure

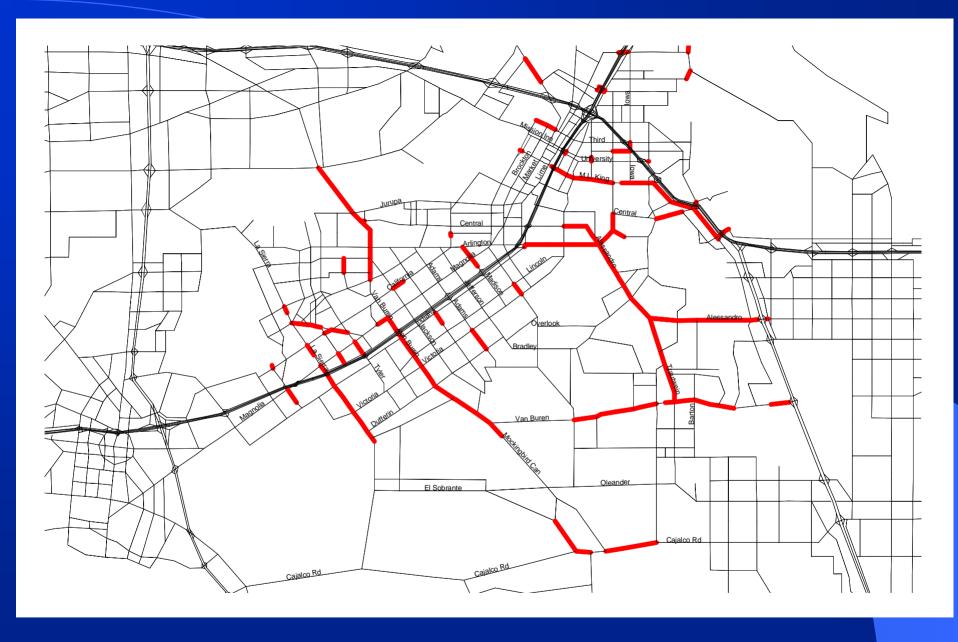
Riverside Network



Traffic Model Analysis

- Model Runs Completed:
 - future land use on existing roads
 - future land use on base future roads (buildout of existing General Plan)
 - future land use on 4 alternatives
- Significant Growth in Traffic observed
- Growth on Cut-through routes



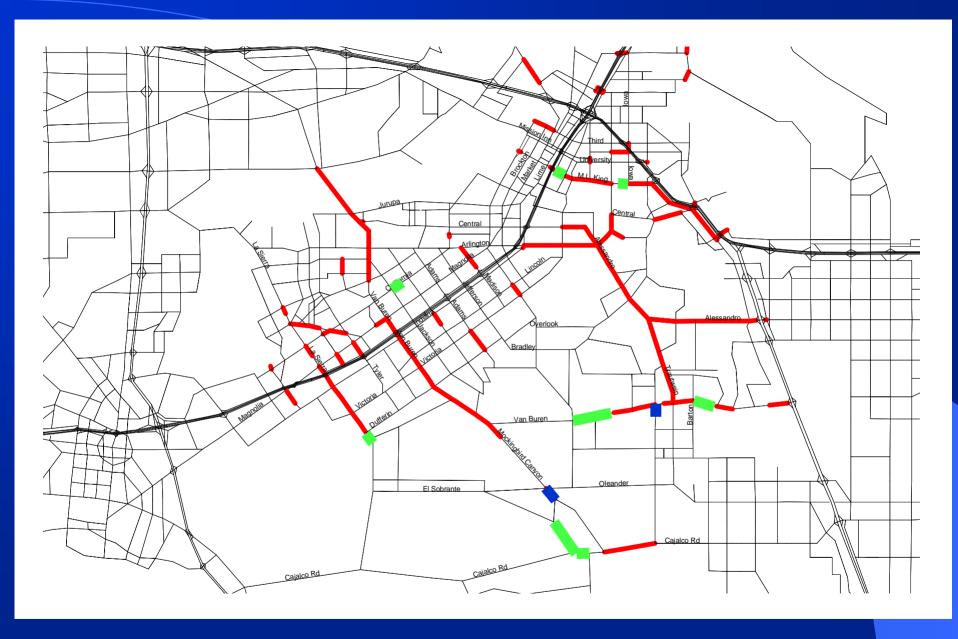


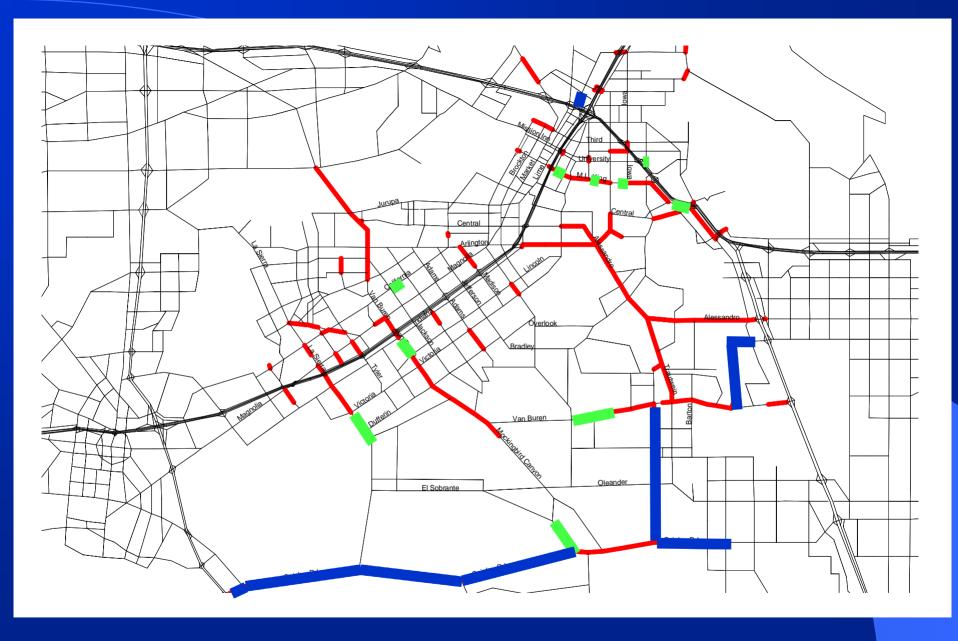
Alternative Analyses

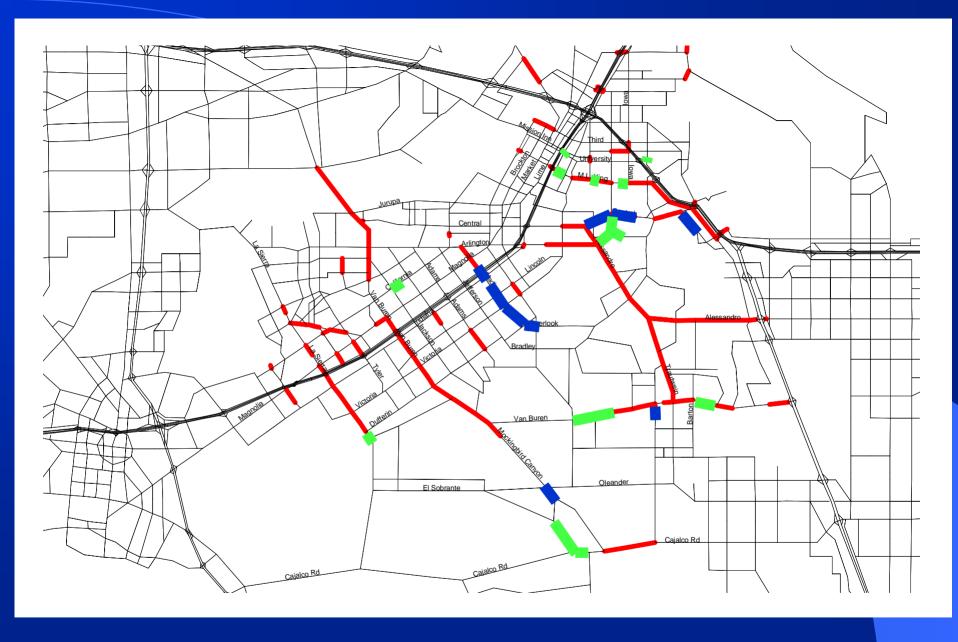
- Alternative 1 General Plan System plus Cajalco as 6-lane expressway to I-15
- Alternative 2 General Plan System plus Cajalco to SR 241 in Orange County
- Alternative 3 Alternative 1 plus Overlook connector (to Madison) and Central Ave connector

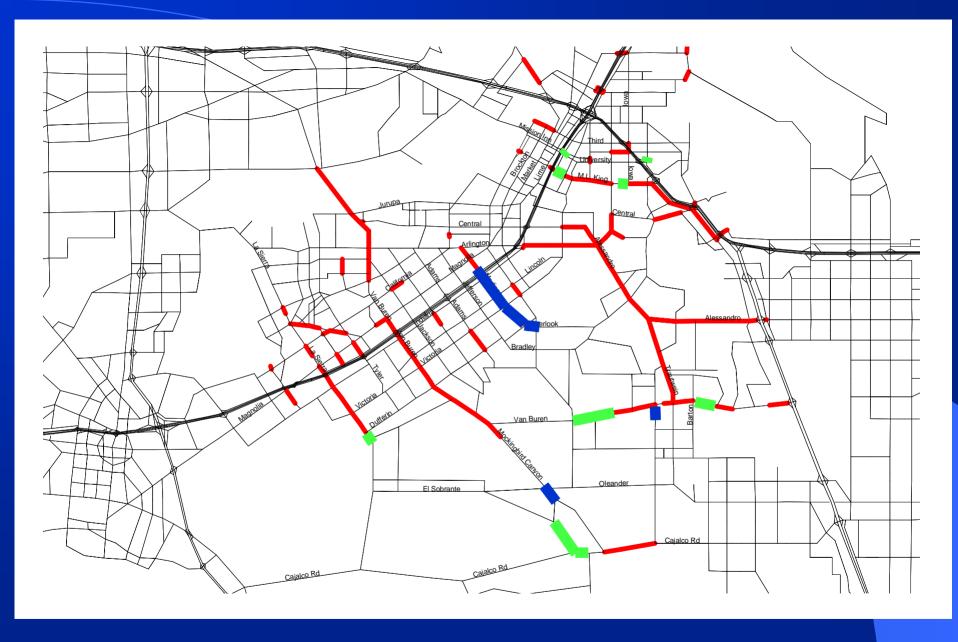
(WAC & CAC recommended inclusion of this Alternative.)

• Alternative 4 – Alternative 1 plus Overlook connector to Madison (w/o Central connector)









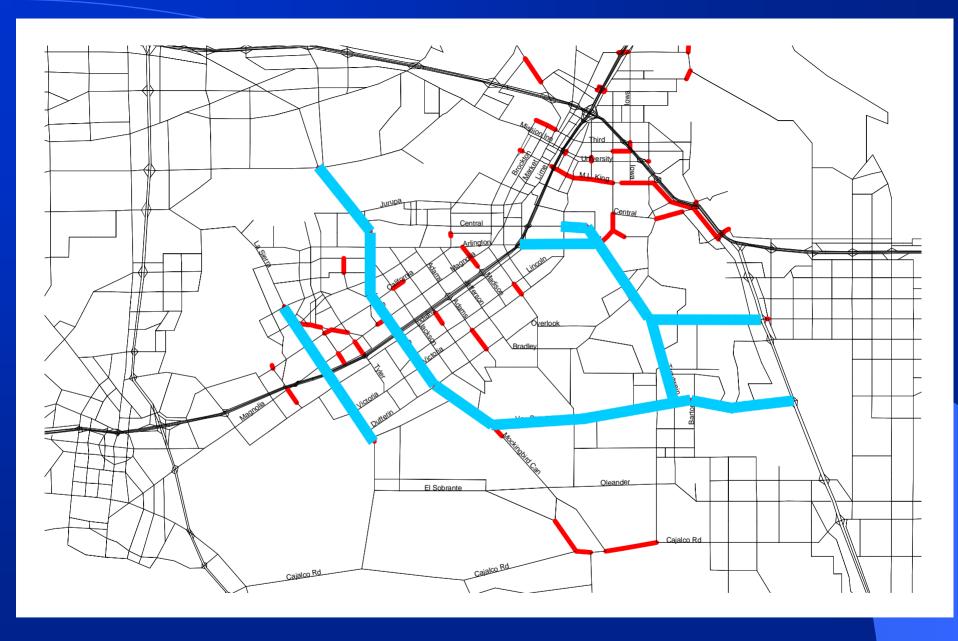
Projected Traffic Volumes

(thousands)

	1			<u> </u>		<u> </u>		
	Existing ADT	General Plan	Cajalco to I-15	Cajalco to SR 241	with Overlook and Central	with Overlook Only		
Van Buren Blvd								
west of Orange Terr	26	58	54	62	55	55		
east of Mockingbird	32	39	36	34	35	35		
near SR 91	35	61	58	51	57	58		
near the River	56	83	83	80	83	83		
Alessandro Blvd								
near I-215	35	62	61	62	60	61		
near Overlook Pkwy	46	78	77	74	75	76		
Cajalco Road								
west of I-215	15	37	55	59	55	55		
east of LaSierra	7	18	44	78	43	44		
Overlook Pkwy								
midway		11	11	11	12	13		
Central Ave								
north of Arlington	29	48	48	46	40	47		
east of I-215	29	43	43	41	54	42		
Chicago Ave								
north of Trautwein	25	44	44	45	36	44		
north of MLK	18	27	27	27	28	27		
MLK Blvd								
west of Chicago	24	44	42	40	38	42		
east of Chicago	22	37	35	32	32	34		
Magnolia Ave								
west of Van Buren	30	40	39	36	36	39		
north of Central	23	28	28	28	28	28		

Roadways with High Average Daily Traffic Volume

Route	Area (County)	Location	No of Lanes	Average Daily Traffic
Wilshire	City of LA (LA)	At Veteran (Both Sides of I-405)		120,000
Sepulveda (1)	South Bay, LAX (LA)	South of Century		90,000
PCH (1)	1 7	Between Dover Dr. and Jamburee Rd.	8	73,000
Imperial Hwy (90)	Fullerton (Orange)	West of 57 Freeway	6	72,000
Bake Pkwy	Lake Forest (Orange)	North of I-5 to Rockfield Blvd	6	72,000
Azusa Ave (N8)	City of Industry (LA)	North and South of Freeway 60		71,000
Sherman Way	• ,	In Van Nuys		70,000
Hawthorne (107)	South Bay, Torrance (LA)	Between Del Amo and 190th Street		70,000
Newport Blvd	Costa Mesa (Orange)	South of 55 Freeway Section	6	70,000
Lincoln Blvd	Marina Del Rey (LA)	North of Marina Freeway to Washington		67,000
Brookhurst Street	Costa Mesa (Orange)	Between Ellis Ave and Garfield Ave	6	66,000
PCH (1)	Santa Monica (LA)	Freeway 10 to Hwy 27		65,000
Macarthur Blvd	Newport Beach (Orange)	From Freeway 73 to Ford Rd.	6	65,000
Beach Blvd (39)	Westminster (Orange)	North of I-405 to Bolsa Ave	8	64,000
		Between Artesia Blvd and Stagered		
Beach Blvd (39)	Buena Park (Orange)	North of I-5	6	63,000
		Between Soledad Cyn Rd. and		
Bouquet Cyn Rd.	Santa Clarita (LA)	Newhall Ranch Rd.		62,000
Sepulveda Blvd.	(/	Between I-110 and Vermont Ave.		62,000
Bristol Street	Costa Mesa (Orange)	Both sides of I-405	6	62,000
Culver Dr.1	Irvine (Orange)	South of I-405	6	62,000
Hawthorne (107)	South Bay, Torrance (LA)	From Lomita to Rodondo Beach		61,000
		Between Manhattan Beach Blvd		
PCH (1)	South Bay, Manhattan Beach (LA)			61,000
Beach Blvd (39)	Huntington Beach (Orange)	Between Talbert Ave and Ellis Ave	8	61,000
Jamboree Rd.	Irvine (Orange)	South of I-405	6	61,000
		South of Inland Empire Boulevard		
Haven Avenue	Ontario (San Bernardino)	(North of I-10)		60,100
Lincoln Blvd	Westchester (LA)	South of Marina Freeway		60,000
Sepulveda (1)	, ,	North of 105 Freeway		60,000
Sierra Avenue	,	North of I-10		57,600
Burbank Blvd	San Fernando Valley (LA)	Near I-405/Sepulveda		55,000
Artesia Blvd (91)	South Bay, Torrance (LA)	West of Freeway section		55,000



Key Findings

- Significant growth on cut-through routes (Arlington/Alessandro, Van Buren, La Sierra)
- Current General Plan significantly improves future conditions
- Current General Plan System is adequate for much of the City
- Cajalco corridor will carry 40-80,000 vehicles/day (six lanes)
- Cajalco serves regional and local trips

Key Findings (con't)

- Overlook Parkway with connections operates satisfactorily, serves local traffic,
- Central Avenue connection improves Alessandro/ Arlington/ Chicago intersection, new connector carries approximately 22,000 vehicles

Issue: Adequacy and Need for Current Circulation Plan

- Current Plan should be maintained and built
 - Includes widening Alessandro to 6-lanes
- Reclassify Magnolia/Market to 4-lanes instead of 6-lanes (continue to require ROW for six lanes)

Issue: Poor Level of Service on Regional Routes

- Do not widen beyond current plan to accommodate regional traffic
- Adopt objectives and policies to accept LOS E on selected regional routes including portions of Van Buren, Arlington/Alessandro/Trautwein, La Sierra and selected freeway interchanges

Issue: Central Avenue Connector

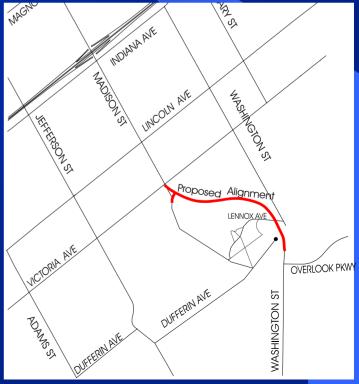
Recommendation:

- WAC & CAC recommended Central Avenue Connector; new roadway lessens congestion at Alessandro/ Arlington/ Chicago intersection but addition of 22,000 vehicles on connector impacts are to the immediate residential neighborhood

Issue: Overlook Parkway westerly connection (Washington to SR 91)

Recommendation:

Add concept alignment to
 Plan, initiate Specific Plan
 level study



Issue: Cajalco Road Expressway/
Improvements

Recommendation:

- Support development of CETAP Corridor, include objectives/policy in Plan supporting expressway to Orange County.

Issue: Reversible Lanes

Recommendation:

- Not feasible on existing roads. Would require removal of medians and costly infrastructure. Investigate other methods to help flow of traffic

Issue: Light Rail/Monorail

Recommendation:

- Encourage usage of existing transit options such as Metrolink, bus and bus rapid transit (BRT); in future, conduct feasibility analysis of light rail/monorail within City if conditions such as land use density warrant

Issue: Adequacy of Bicycle and Pedestrian Plan

- Current Plan should be maintained and built
- Ensure adequate connections between all alternative modes
- Connect "Riverside Park" (concept of open space ring surrounding the City) using bicycle/ pedestrian modes where feasible

Issue: Preserving Local/Residential Streets

- Continue City's effective policies and procedures which improves neighborhood safety and directs cut-through traffic to proper streets
- Update and modify program as needed as conditions change

Issue: Public Transit

- Support transit usage and upgrades
- Support RTA's Bus Rapid Transit Program and Go Riverside Task Force
- Support Metrolink
- Incorporate transit improvements in land use planning, specific plans, etc

Issue: Regional Cut-Through Traffic and Toll Roads

Recommendation:

Cannot apply toll road concept on existing public roadways

Issue: Regional System Improvements

- Include objectives/policies to work closely with RCTC, Caltrans, SCAG, WRCOG, adjacent Cities/County and others to plan, design and implement needed improvements to State highways and other regionally significant routes
- Support other regional "Beltway" improvements (I-15, SR 91, SR 60, I-215)

Summary

- Current Plan should be maintained and built
- Complete widening of Alessandro/ Arlington to 6lanes
- Complete Overlook Pkwy concurrent with its extension westerly of Washington
- Central Ave "?"
- Downgrade Magnolia/ Market to 4-lane (maintain current ROW)
- Support Cajalco Expressway to Orange County
- Support alternative modes of transportation